

IN THE CLAIMS:

Please amend Claims 1, 5, 8 and 10 to 14, and add new Claims 17 to 20 as shown below. The claims, as pending in the subject application, now read as follows:

1. (Currently Amended) An information processing apparatus that serves as a host computer for forming print data which can be interpreted to be printed by a printing apparatus, comprising:

receiving ~~obtaining~~ means for receiving ~~obtaining~~ draw information based on a print document ~~which is~~ formed by an application;

obtaining ~~setting~~ means for obtaining a plurality of pieces of ~~setting~~ print set information ~~at the time of executing a printing process of the print data by said printing apparatus~~ stored in a storage unit; and

estimating means for estimating, for each of the plurality of pieces of print set information obtained by said obtaining means, a print time ~~which is~~ required for a the printing process ~~on the basis~~ of the draw information received by said receiving means; and

forming means for forming, if a user is informed of the print times estimated for the plurality of pieces of print set information by said estimating means and if execution of the printing process is determined, said print data which can be interpreted by the printing apparatus based on the draw information received by said receiving means and a selected one of the plurality of pieces of print set information obtained by said obtaining means and the print set information set by said setting means.

2. (Original) An apparatus according to claim 1, wherein said obtaining means obtains the draw information including an ID of every object constructing said print document before the execution of the print through an expansion API provided between a printer driver and said application.

3. (Original) An apparatus according to claim 1, wherein said print set information is information regarding print quality in said print data.

4. (Original) An apparatus according to claim 1, wherein said print set information includes information regarding print quality in said print data and information regarding a print layout.

5. (Currently Amended) An apparatus according to claim 1, wherein said estimating means estimates the print time required for the printing process of one piece of draw information received by said receiving means for each of the plurality of pieces of print set information obtained by said obtaining means, and further comprising:

informing means for informing the user of the print times ~~time which is~~ estimated for the plurality of pieces of print set information by said estimating means before the said print data is formed by said ;and forming means ~~for forming the print data based on said print document after the print time was informed by said informing means.~~

6. (Original) An apparatus according to claim 5, wherein said informing means provides said print time and a user interface for promoting an input of an instruction to execute the printing process which requires said print time.

7. (Original) An apparatus according to claim 6, wherein the user interface which is informed by said informing means accepts the input of the instruction for canceling the execution of the printing process which requires said print time.

8. (Currently Amended) An apparatus according to claim 1, further comprising setting means for setting the plurality of pieces of print set information to be obtained by said obtaining means, ~~wherein said setting means sets a print profile obtained by collecting a plurality of print set information at the time of executing the printing process of the print data by said printing apparatus, and said estimating means estimates the print time which is required for the printing process every plural print profiles which are set by said setting means.~~

9. (Original) An apparatus according to claim 1, further comprising transmitting means for transmitting said print data to said printing apparatus through a network.

10. (Currently Amended) An information processing method of forming print data which can be interpreted to be printed by a printing apparatus, comprising:

~~a receiving~~ ~~an obtaining~~ step of receiving ~~obtaining~~ draw information based on a print document ~~which is~~ formed by an application;

~~an obtaining~~ ~~a setting~~ step of obtaining a plurality of pieces of ~~setting~~ print set information stored in a storage unit at the time of executing a printing process of the print data by said printing apparatus; and

an estimating step of estimating, for each of the plurality of pieces of print set information obtained in said obtaining step, a print time ~~which is~~ required for ~~a the~~ printing process ~~on the basis of the draw information~~ received in said receiving step; and

a forming step of forming, if a user is informed of the print times estimated for the plurality of pieces of print set information in said estimating step and if execution of the printing process is determined, said print data which can be interpreted by the printing apparatus based on the draw information received in said receiving step and a selected one of the plurality of pieces of print set information obtained by said obtaining step and the print set information set by said setting step.

11. (Currently Amended) A computer-readable memory medium which stores an information processing program for an information processing apparatus that serves as a host computer for forming print data which can be interpreted to be printed by a printing apparatus, wherein said program comprises:

~~a receiving~~ ~~an obtaining~~ step of receiving ~~obtaining~~ draw information based on a print document ~~which is~~ formed by an application;

~~an obtaining a setting step of obtaining a plurality of pieces of setting print set information stored in a storage unit at the time of executing a printing process of the print data by said printing apparatus; and~~

~~an estimating step of estimating, for each of the plurality of pieces of print set information obtained in said obtaining step, a print time which is required for a the printing process on the basis of the draw information received in said receiving step; and~~

~~a forming step of forming, if a user is informed of the print times estimated for the plurality of pieces of print set information in said estimating step and if execution of the printing process is determined, said print data which can be interpreted by the printing apparatus based on the draw information received in said receiving step and a selected one of the plurality of pieces of print set information obtained by said obtaining step and the print set information set by said setting step.~~

12. (Currently Amended) A computer-executable program stored on a computer-readable memory medium, said program for forming print data which can be interpreted by a printing apparatus, product obtained by an information processing program for an information processing apparatus for forming print data to be printed by a printing apparatus, wherein said program comprises comprising:

a receiving an obtaining step of receiving obtaining draw information based on a print document which is formed by an application;

an obtaining a setting step of obtaining a plurality of pieces of setting print set information at the time of executing a printing process of the print data by said printing apparatus stored in a storage unit; and

an estimating step of estimating, for each of the plurality of pieces of print set information obtained in said obtaining step, a print time ~~which is~~ required for a the printing process ~~on the basis~~ of the draw information received in said receiving step; and

a forming step of forming, if a user is informed of the print times estimated for the plurality of pieces of print set information in said estimating step and if execution of the printing process is determined, said print data which can be interpreted by the printing apparatus based on the draw information received in said receiving step and a selected one of the plurality of pieces of print set information obtained by said obtaining step and the print set information set by said setting step.

13. (Currently Amended) An information processing apparatus that serves as a host computer for forming print data which can be interpreted to be printed by a printing apparatus, comprising:

obtaining means for obtaining draw information based on a print document ~~which is~~ formed by an application;

estimating means for analyzing the draw information ~~which is~~ obtained by said obtaining means, and for estimating a print time ~~which is~~ required for a printing process of the said draw information for each of a plurality of print modes stored in a storage unit; and

display control means for allowing the print time estimated by said estimating means to be displayed in correspondence to each of the plurality of said print modes;

selection means for selecting one of the plurality of print modes displayed  
by said display control means; and  
forming means for forming said print data based on the one print mode  
selected by said selection means and the draw information obtained by said obtaining  
means.

14. (Currently Amended) An apparatus according to claim 13, wherein said display control means allows a button for displaying a preview image for confirming an image quality to be displayed in correspondence to said plurality of print ~~mode~~ modes.

15. (Original) An apparatus according to claim 13, further comprising discriminating means for analyzing the draw information which is obtained by said obtaining means and discriminating a proper print mode from said plurality of print modes, wherein said display control means allows a message for recommending the print mode discriminated by said discriminating means to be displayed.

16. (Original) An apparatus according to claim 15, wherein said discriminating means discriminates the proper print mode on the basis of a ratio of color data of the draw information.

17. (New) An information processing method of forming print data which can be interpreted by a printing apparatus, comprising:

an obtaining step of obtaining draw information based on a print document formed by an application;

an estimating step of analyzing the draw information obtained in said obtaining step, and of estimating a print time required for a printing process of the draw information for each of a plurality of print modes stored in a storage unit;

a display control step of allowing the print time estimated in said estimating step to be displayed in correspondence to each of the plurality of print modes;

a selection step of selecting one of the plurality of print modes displayed in said display control step; and

a forming step of forming the print data based on the one print mode selected in said selection step and the draw information obtained in said obtaining step.

18. (New) A computer-readable memory medium which stores an information processing program for an information processing apparatus that serves as a host computer for forming print data which can be interpreted by a printing apparatus, wherein said program comprises:

an obtaining step of obtaining draw information based on a print document formed by an application;

an estimating step of analyzing the draw information obtained in said obtaining step, and of estimating a print time required for a printing process of the draw information for each of a plurality of print modes stored in a storage unit;



a display control step of allowing the print time estimated in said estimating step to be displayed in correspondence to each of the plurality of print modes;

a selection step of selecting one of the plurality of print modes displayed in said display control step; and

a forming step of forming the print data based on the one print mode selected in said selection step and the draw information obtained in said obtaining step.

19. (New) A computer-executable program stored on a computer-readable memory medium, the program for forming print data which can be interpreted by a printing apparatus, said program comprising:

an obtaining step of obtaining draw information based on a print document formed by an application;

an estimating step of analyzing the draw information obtained in said obtaining step, and of estimating a print time required for a printing process of the draw information for each of a plurality of print modes stored in a storage unit;

a display control step of allowing the print time estimated in said estimating step to be displayed in correspondence to each of the plurality of print modes;

a selection step of selecting one of the plurality of print modes displayed in said display control step; and

a forming step of forming the print data based on the one print mode selected in said selection step and the draw information obtained in said obtaining step.

20. (New) An apparatus according to Claim 5, further comprising selection means for selecting one of the plurality of pieces of print set information stored in the storage unit for execution of the printing process after said informing means informs the user of the estimated print times.